English

YAMAHA

SILENT Piano™ SH

Owner's manual

SPECIAL MESSAGE SECTION

This product utilizes an external power supply (adaptor). DO NOT connect this product to any power supply or adaptor other than one described in the manual, on the name plate, or specifically recommended by Yamaha.

WARNING:
Do not place this product in a position where anyone could walk on, trip over, or roll anything over power cords or other connecting cords. The use of an extension cord is not recommended! If you must use an extension cord, the minimum wire size for a 25' cord (or less) is 18 AWG.

NOTE:
The smaller the AWG number, the larger the current handling capacity. For longer extension cords, consult a local electrician.

This product should be used only with the components supplied or; a cart, rack, or stand that is recommended by Yamaha. If a cart, etc., is used, please observe all safety markings and instructions that accompany the accessory product.

SPECIFICATIONS SUBJECT TO CHANGE:
The information contained in this manual is believed to be correct at the time of printing. However, Yamaha reserves the right to change or modify any of the specifications without notice or obligation to update existing units.

Do not attempt to service this product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

This product, either alone or in combination with an amplifier and headphones or speaker/s, may be capable of producing sound levels that could cause permanent hearing loss. DO NOT operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.

IMPORTANT:
The louder the sound, the shorter the time period before damage occurs.

Some Yamaha products may have benches and/or accessory mounting fixtures that are either supplied as a part or the product or as optional accessories. Some of these items are designed to be dealer assembled or installed. Please make sure that benches are stable and any optional fixtures (where applicable) are well secured BEFORE using. Benches supplied by Yamaha are designed for seating only. No other uses are recommended.

NOTICE:
Service charges incurred due to lack of knowledge relating to how a function or effect works (when the unit is operating as designed) are not covered by the manufacturer's warranty, and are therefore the owners responsibility. Please study this manual carefully and consult your dealer before requesting service.

ENVIRONMENTAL ISSUES:
Yamaha strives to produce products that are both user safe and environmentally friendly. We sincerely believe that our products and the production methods used to produce them, meet these goals. In keeping with both the letter and the spirit of the law, we want you to be aware of the following:

Disposal Notice:
Should this product become damaged beyond repair, or for some reason its useful life is considered to be at an end, please observe all local, state, and federal regulations that relate to the disposal of products that contain lead, batteries, plastics, etc. If your dealer is unable to assist you, please contact Yamaha directly.

PLEASE KEEP THIS MANUAL

Introduction

Features

Yamaha's Innovative Silencing System

- The hammer shank stopper stops the movement of the hammer just before striking the string, and the optical sensor will catch keystroke information precisely. The internal tone generator receives the keystroke information and reproduces enrich sound of the piano.
- The noncontact optical sensor faithfully detects subtle movement of the keys without affecting the touch of the keys. You can enjoy the natural expression of the music.

Realistic Piano Voice

- The piano voice is faithfully sampled from the Yamaha CFX concert grand piano. You can enjoy the clear and beautiful tone of the piano.
- The piano voice is sampled with the binaural sampling* method. Even if you listen through headphones, you can enjoy the immersive sound, as if it sounds from the piano. In addition, you can enjoy the natural sound for a long time without straining the ear.
- The unit is equipped with various effects that reproduce the specific resonance of an acoustic piano (Damper Resonance, String Resonance, and Sustain Sample). You can also add subtle sound produced when the keys are released (Key-off Sample). By combining these, you can enjoy the realistic and rich piano sound even when used with the Silent Piano™ function.

* Binaural sampling: method that uses two microphones set at the ear position of a performer and records the sound from a piano as it is.

Useful Features for Lesson

- You can record your performance on the internal memory or commercially available USB storage device. Since you can record your performance as an audio data (WAV) as well as a MIDI data (USB Audio Recorder), it is now easy to create your own CDs or upload your performance to the net.
- The metronome is built in this unit. You can practice playing or record your performance more accurately with the metronome.
- Since the unit has two headphone jacks, you can practice sharing your performance with others, or enjoy a duet. The supplied headphones have an open type structure which reproduces the high-quality and clear sound.
- 50 masterpieces of piano are preset on the unit. The unit also comes with a corresponding music book "50 greats for the Piano."
- In addition to a piano voice, the unit has various voices of instruments, such as harpsichord or pipe organ.

Accessories

Check that the following items are supplied with your piano.

- AC adaptor (PA-150A, PJP-PS04 or an equivalent recommended by Yamaha) × 1
- Power cable × 1 *
- Headphones (HPH-200P) × 1
- Headphones hanger × 1
- Attachment screws for headphones hanger × 2
- Owner's manual × 1
- Music book "50 greats for the Piano" × 1

* Supplied only if the PJP-PS04 AC adaptor is supplied with your piano.

Installation

⚠ Avoid placing this instrument in direct sunlight, in close proximity to heating equipment or other high temperature areas, or in locations with a high degree of humidity.

⚠ Avoid placing this instrument in dusty or dirty areas.

⃠ Do not expose this instrument to spray or fumes.

❗ Use only the specified AC adaptor. Use of other AC adaptors may result in damage, overheating, or fire.

Table of Contents

Chapter 1 **Getting Started 6**

Part Names and Functions 6
Connecting the AC Adaptor 9
Attaching the Headphones Hanger 10
Turning the Power On 10

Chapter 2 **Playing the Piano 11**

Using the Silent Piano™ Function 11
Selecting Voices 12
Applying the Reverb Effect 14
Using the Metronome 15

Chapter 3 **Playing Back Songs 16**

Songs You Can Play on This Unit 16
Playing Back the Demonstration Song 17
Playing Back the Preset Song 18
Playing Back the Song Recorded on the Internal Memory 19
Playing Back the Song Saved on the USB Storage Device 20
Operations during Playback 22
Changing the Playback Tempo 23

Chapter 4 **Recording Your Performance 24**

Recording Your Performance on the Internal Memory 24
Recording Your Performance on the USB Storage Device 26
Recording with the Metronome 28

Chapter 5 **Handling Song Files 29**

Copying a Song File to the USB Storage Device 29
Deleting a Song File 31

Chapter 6 **Connecting to Other Devices 33**

Connecting to Audio Devices 33
Connecting to MIDI Devices 35
Connecting the USB Storage Device 36
Connecting Powered Speakers [for Grand Piano] 37

Chapter 7 **Using Various Functions 38**

Setting the Various Convenient Functions (Function Setup) 38
Details on Each Function Setup Item 40
Restoring the Default Settings 45
Changing the Language Support for the Song File Name 45
Deactivating the Auto Power-off Function 46

Chapter 8 **Appendix 47**

Messages 47
Troubleshooting 48
Preset Voice List 49
Song List 50
Playback Sequence of Song Files on the USB Storage Device 51
Specifications 52
Index 53

XG Voice List D2

XG Drum Kit List D5

MIDI Data Format D7

MIDI IMPLEMENTATION CHART D18

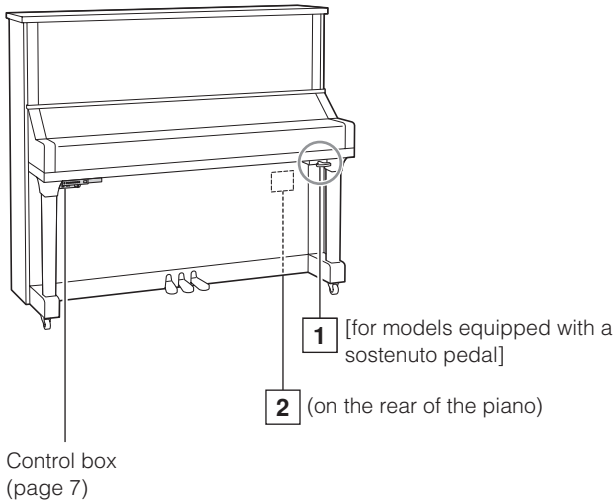
Chapter

1 Getting Started

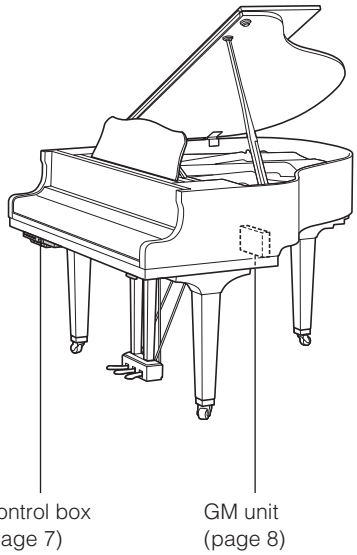
Part Names and Functions

■ Piano

Upright piano



Grand piano

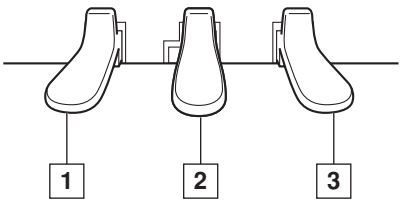


1 Silencing lever
Activates the Silent Piano™ function (page 11).

2 DC12V jack
Connect the supplied AC adaptor (page 9).

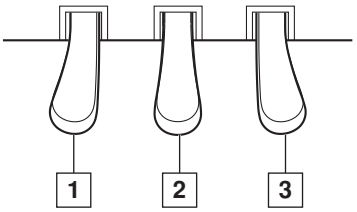
■ Pedals

Upright piano



1 Soft pedal / shift pedal
Reduces the volume and slightly changes the timbre notes played after the pedal is pressed.
When you select the Electric Piano voice, this pedal switches between on and off of the chorus effect.
When you select the Vibraphone voice, this pedal switches between on and off of the vibrato.
When you select the Jazz Organ voice, this pedal switches the rotary speaker speed (fast and slow).

Grand piano



2 Silencing pedal
[For models not equipped with a sostenuto pedal]
Activates the Silent Piano™ function (page 11).

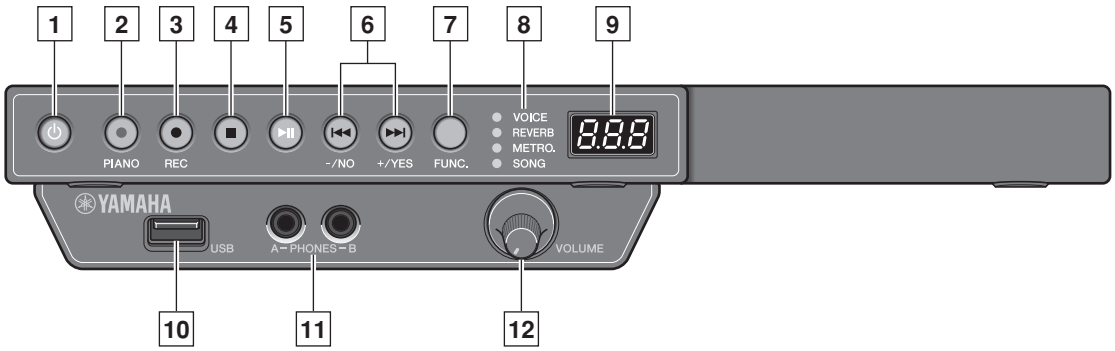
Sostenuto pedal
[For models equipped with a sostenuto pedal]
Sustains the notes that are being played at that time even after you release the keys. Subsequently played notes are not affected.

3 Damper pedal
Sustains notes even after you release the keys. While performing with the Piano voice, this recreates a sympathetic resonance occurs in the strings and soundboard on an acoustic piano (Damper Resonance effect). You can set the depth of this resonance in the Function Setup (page 38).

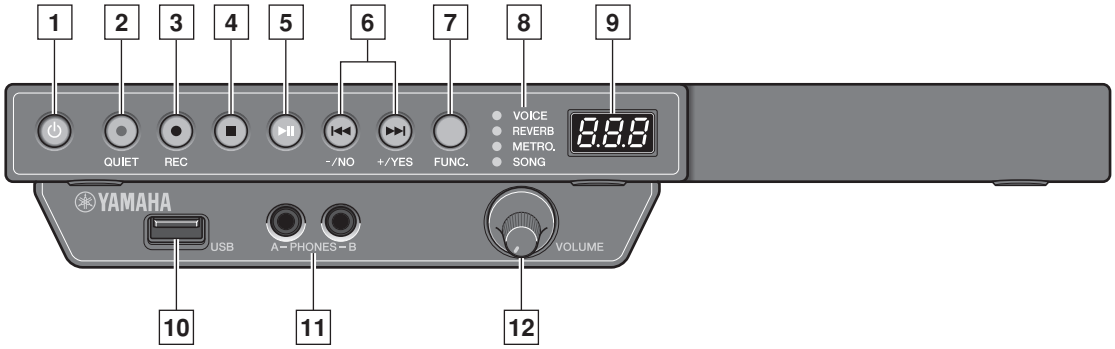
Part Names and Functions

■ Control box (front panel)

Upright piano



Grand piano



1 POWER ⏻ button
Turns the digital piano on and off.

2 PIANO button
[For upright pianos]
Switches the voice of the digital piano to the Piano voice.

QUIET button
[For grand pianos]
Activates the Silent Piano™ function (page 11).

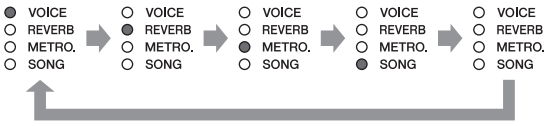
3 REC button
Places the instrument in record standby mode.

4 STOP button
Stops playback.

5 PLAY/PAUSE button
Starts and pauses playback.

6 +/YES and –/NO buttons
Select songs, voices, and parameters, or set values of various settings.

7 FUNC. button
Switches the function. The function will be switched as follows each time you press this button.



8 Function indicators
Show the selected function.

9 Display
Shows the voice number, song number, or values of various settings.

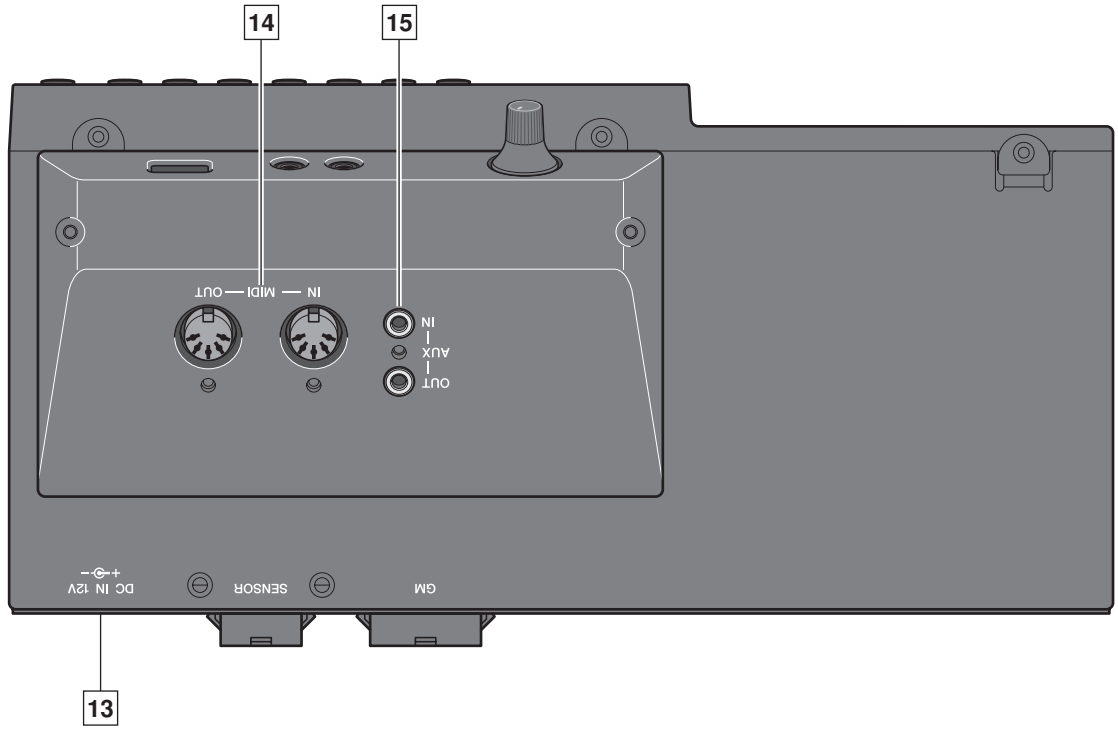
10 USB port
Connect the USB storage device (page 36).

11 PHONES jacks (stereo mini jack)
You can connect two stereo headphones, allowing you to share your playing with another person.

12 VOLUME knob
Adjusts the volume for headphones, the OUTPUT jacks (only for grand piano), and the AUX OUT jack (page 11).

Part Names and Functions

■ Control box (bottom panel)

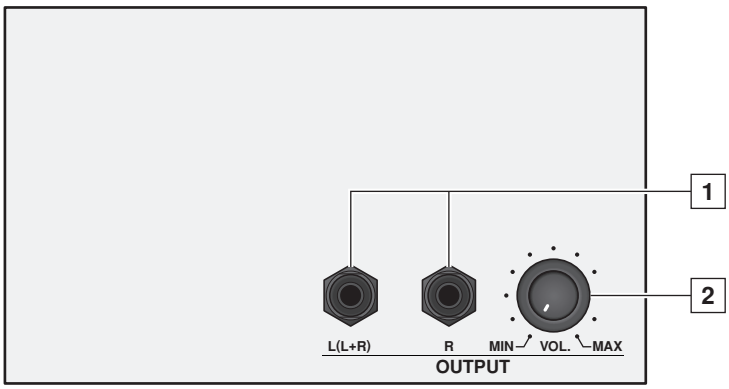


13 DC IN 12V jack
Connect the supplied AC adaptor (page 9).

14 MIDI IN/MIDI OUT jacks
Connect to the input or output jacks of external MIDI devices.

15 AUX IN/AUX OUT jacks (stereo mini jack)
Connect to the input or output jacks of external audio devices.

■ GM unit [for grand piano]



1 OUTPUT L (L+R)/R jacks (TRS phone jack)
Connect the optional powered speakers (page 37).

2 OUTPUT VOL. knob
Adjusts the volume for the OUTPUT L (L+R)/R jacks.

Connecting the AC Adaptor

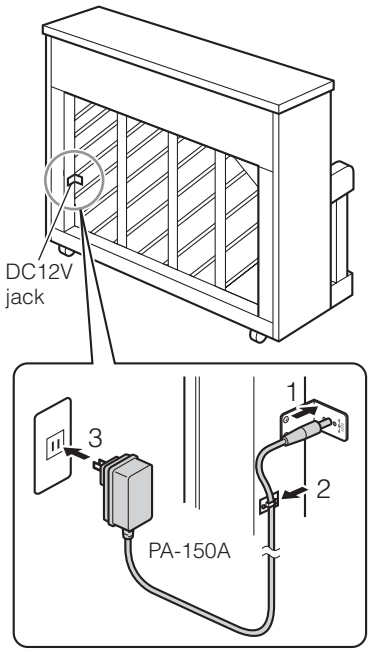
■ Upright piano

Note
For some models, the PJP-PS04 AC adaptor is supplied.

1 **Connect the AC adaptor to the DC12V jack at the rear of the piano.**

2 **Loop the cord through the hook on the piano, as shown.**

3 **Connect the AC adaptor to the AC wall outlet.**

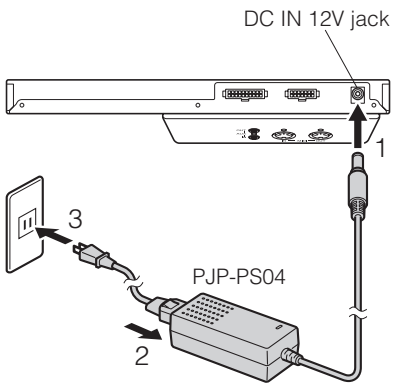


■ Grand piano

1 **Connect the AC adaptor to the DC IN 12V jack at the rear of the control box.**

2 **Connect the power cable to the AC adaptor.**

3 **Connect the power cable extended from the AC adaptor to the AC wall outlet.**

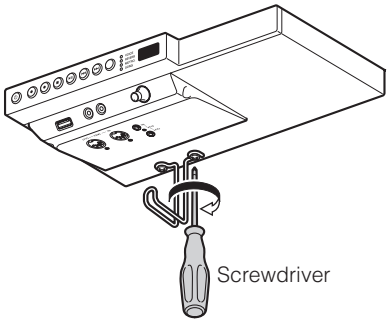


⚠ Warning
Use the Yamaha PA-150A/PJP-PS04 AC adaptor, or an equivalent recommended by Yamaha. Use of other AC adaptors may result in damage, overheating, or fire.

⚠ Caution
- Do not stretch the cord or bend its ends.
- Do not attempt to use the cord if it is stretched or if the ends of the cord have been bent. Attempting to do so may cause interruptions to the power supply.
- Always turn off the main unit power before disconnecting the AC adaptor.
- When you wish to move the Silent Piano™, unplug the AC adaptor from the AC outlet and disconnect it from the DC12V or DC IN 12V jack before proceeding.
- Unplug the AC adaptor from the AC outlet if you do not intend to use the instrument for an extended period of time.

Attaching the Headphones Hanger

Attach the hanger to the underside of the control box with the two screws supplied.



Turning the Power On

1 Press the POWER ⏻ button.

The POWER lamp lights up.
The display shows the voice number “1” (Piano).

Note
- The sound is not output properly if you hold down the keyboard while turning the power on. Remove your hand from the keyboard when turning the power on.
- [For grand pianos] The Silent Piano™ function will be automatically activated and the QUIET lamp lights up when you turn the power on.

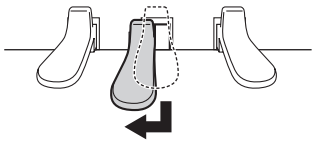
Chapter

2 Playing the Piano

Using the Silent Piano™ Function

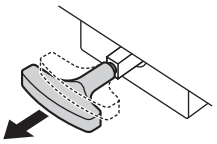
1 [For upright pianos not equipped with a sostenuto pedal]

Press the center pedal and slide it to the left.



[For upright pianos equipped with a sostenuto pedal]

Pull the silencing lever towards you until you hear a click and feel the mechanism catch.



[For grand pianos]

Press the QUIET button.

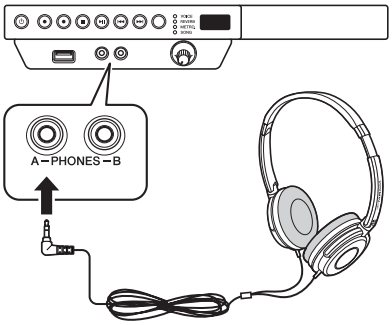
The QUIET lamp lights up and the Silent Piano™ function is activated.

Note

[For grand pianos] The Silent Piano™ function will be activated and the QUIET lamp lights up immediately after turning the power on. In that case, this operation is unnecessary.

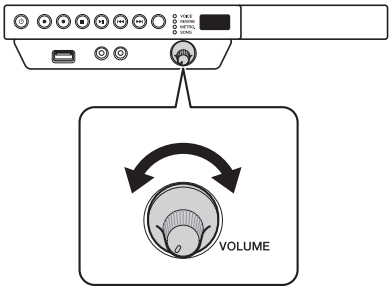
2 **Plug the headphones into the PHONES jack.**

You can use two sets of headphones simultaneously.



3 **Adjust the volume with the VOLUME knob.**

To set the appropriate volume, adjust it while playing the keyboard and listening to the sound.



⚠ Caution

- To prevent damage to your hearing, refrain from raising the volume to excessive levels, and do not use the headphones for extended periods of time.
- Do not pull the headphone cord or apply excessive force on the plug. This can damage the headphone and lead to sound output malfunction.

Note

- When you connect two sets of headphones simultaneously, use the same type of headphones for optimum performance.
- The keying sound of the keyboard remains even though the Silent Piano™ function is activated.
- Adjusting the volume with the VOLUME knob affects the output level of headphones, the OUTPUT jacks (only for grand piano), and the AUX OUT jack.

Selecting Voices

When using the Silent Piano™ function, you can use the internal voices of this unit to perform with voices other than that of a piano.

1 Press the FUNC. button repeatedly to switch the function to VOICE.

The number of the currently selected voice appears on the display.

2 Press the +/YES or –/NO button to select the desired voice.

Voice		Explanation
OFF	Off	The unit does not use any voices.
1	Piano	A piano sound sampled from the Yamaha CFX concert grand piano.
2	Electric Piano 1	An electronic piano sound produced by an FM synthesizer.
3	Electric Piano 2	The sound of an electric piano using hammer-struck metallic “tines.”
4	Electric Piano 3	The sound of an electric piano widely used in rock and popular music.
5	Harpsichord 1	The sound of the instrument frequently used in baroque music.
6	Harpsichord 2	A harpsichord with an added upper octave.
7	Vibraphone	Vibraphone played with relatively soft mallets
8	Celesta	The sound of a celesta (a percussion instrument in which hammers strike metallic bars to produce sound).
9	Pipe Organ 1	The voice featuring the combination of pipes (8'+4'+2') of a principal (brass instrument) organ.
10	Pipe Organ 2	The voice featuring a full coupler of a pipe organ.
11	Pipe Organ 3	A pipe organ sound that combines flute-type (woodwind type) stops of different pitches (8'+4').
12	Pipe Organ 4	A pipe organ sound that combines flute-type (woodwind type) stops of different pitches (8'+4'+1-1/3').
13	Jazz Organ	The sound of a “tonewheel” type electric organ.
14	Strings	Stereo-sampled, large-scale strings ensemble with realistic reverb.
15	Choir	A big, spacious choir voice.
16	Synth Pad	A warm, mellow, and spacious synth sound.
17	Piano + Strings	Combination of the Piano and Strings (with a slower attack) voices (dual voice).
18	Piano + Synth Pad	Combination of the Piano and Synth Pad voices (dual voice).
19	Piano + Electric Piano 1	Combination of the Piano and Electric Piano 1 voices (dual voice).

Note

You can recall the default voice setting (Piano) by pressing the +/YES and –/NO buttons simultaneously.

Note

- The voice setting reverts to its default setting when you turn the unit off.
- The selected voice applies only to the sound of your performance. It does not apply to the song playback.
- See “Preset Voice List” on page 49 for details on voices.

Selecting Voices

■ Changing the voice to that of a piano [for upright piano]

You can change the voice to that of a piano with the touch of a button.

1 **Press the PIANO button.**

The PIANO lamp lights up and the voice is changed to that of a piano.

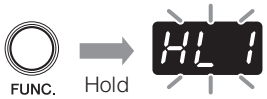
Applying the Reverb Effect

A piano sounds differently depending on the size of the room, or the material of the building in which it is played. The reverberation is the major reason for this difference. Using the reverb functions and simulating the reverberation in a concert hall, gives you the feeling of the being at a live performance.

1 Press the FUNC. button repeatedly to switch the function to REVERB.

The current depth setting appears on the display.

2 Hold the FUNC. button for a second to switch to the reverb type selection display.



The currently selected reverb type blinks on the display.

3 Press the +/YES or –/NO button to select the desired reverb type.

Reverb Type		Explanation
roo	Room	Reverberation similar to that heard in a normal room.
HL 1	Hall 1	Reverberation similar to that heard in a small concert hall.
HL 2	Hall 2	Reverberation similar to that heard in a large concert hall.
StG	Stage	Reverberation similar to that heard on a stage.

Note
You can recall the default reverb type by pressing the +/YES and –/NO buttons simultaneously.

4 Press the FUNC. button to return to the reverb depth setting display.

5 Press the +/YES or –/NO button to adjust the reverb depth.

You can adjust the reverb depth in the range of 0 to 20. The reverb is off when you set the depth to 0.

Note
You can recall the default reverb depth by pressing the +/YES and –/NO buttons simultaneously.

Note
- The reverb setting (type and depth) does not revert to its default setting when you turn the unit off.
- The default reverb setting is different for each voice.

Using the Metronome

The unit features the built-in metronome that helps you to play at the accurate tempo.

1 Press the FUNC. button repeatedly to switch the function to METRO.

The current tempo setting appears on the display.

2 Press the PLAY/PAUSE button to start the metronome.

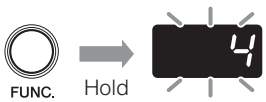
3 Press the +/YES or –/NO button to change the tempo.

You can change the tempo in the range of 5 to 500 (bpm).

Note
You can recall the default tempo setting (120) by pressing the +/YES and –/NO buttons simultaneously.

4 Hold the FUNC. button for a second to switch to the beat setting display.

The current beat setting blinks on the display.



5 Press the +/YES or –/NO button to change the beat.

You can change the beat in the range of 2 to 15, or 0.
The first beat is accented with the bell sound and the rest with clicks.
When the beat is set to 0, clicks sound on all beat.

Note
You can recall the default beat setting (0) by pressing the +/YES and –/NO buttons simultaneously.

6 Press the FUNC. button to return to the tempo setting display.

7 Press STOP button to stop the metronome.

Note
- The metronome setting (tempo and beat) reverts to its default setting when you turn the unit off.
- The tempo appears on the tempo setting display indicates the number of beats in a minute, and one beat represents a quarter. When you play a song written in different measure unit from quarter note, change the setting (e.g. when playing a song in 3/2, set beat to 6/4).
- You can also use metronome when recording your performance (page 28).
- You can adjust the volume of the metronome in the Function Setup (page 38).

Chapter

3 Playing Back Songs

Songs You Can Play on This Unit

The unit can play the preset songs, songs you recorded, or commercially available songs. In this manual, they are collectively called “songs.” You can simply listen to these songs, but also practice playing along with the song playback.

■ Playable song data format

Song Format	**MIDI song** In a MIDI song, the information of your keyboard performance (such as keystroke and velocity) is recorded. This is not a recording of the actual sound. Based on the performance information, the tone generator outputs the sound.	**Audio song** An audio song is a recording of the actual sound performed.
File Format	**SMF0** Standard MIDI File format 0 for playback and recording. MIDI songs recorded with this unit are saved in this format. **SMF1** Standard MIDI File format 1 for playback only. **ESEQ** Format developed by Yamaha, for playback only.	**WAV** Audio file format commonly used in computers. The unit can play back 44.1kHz/16bit stereo WAV file. Audio songs recorded with this unit are saved in this format.
Extension	.MID / .EVT / .ESQ / .PLS / .KAR / .FIL	.WAV

Note
- Keys do not move during the song playback.
- Use headphones or commercially available powered speakers to listen to the song.
- You can also play back the music software for Disklavier purchased from the “Yamaha MusicSoft” website. For further information, refer to the following website:
  Yamaha MusicSoft: http://www.yamahamusicsoft.com/

■ Playable song type (song category)

Song Category		Explanation
	Demonstration songs	The demonstration songs on the unit.
	Preset songs	The songs preset on the unit. These correspond to the score in the music book “50 greats for the Piano.”
	User songs on the internal memory	The MIDI songs you recorded and saved on the unit.
	USB MIDI (user songs)	The MIDI songs you recorded and saved on the USB storage device.
	USB MIDI (external songs)	The MIDI songs created with other instrument on the USB storage device.
	USB AUDIO (user songs)	The audio songs you recorded and saved on the USB storage device.
	USB AUDIO (external songs)	The audio songs created with other instrument on the USB storage device.

Note
Songs you recorded with this unit are called “user songs.” Songs created with other instrument are called “external songs.”

Playing Back the Demonstration Song

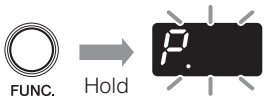
You can play back any of the demonstration songs stored in this unit.

1 Press the FUNC. button repeatedly to switch the function to SONG.

The song number of the currently selected category appears on the display.

2 Hold the FUNC. button for a second to switch to the song category selection display.

The currently selected song category blinks on the display.



3 Press the +/YES or –/NO button to select "d." (demonstration songs).

4 Press the FUNC. button to return to the song selection display.

5 Press the +/YES or –/NO button to select the desired song number.

Song Number		Explanation
d.01	d.01 – d.03	Plays back only the selected song. When the playback advanced to the end of the selected song, playback stops.
d.rd	Random playback	Plays back all demonstration songs continuously in random order.
d.AL	All playback	Plays back all demonstration songs continuously in sequence.

Note

- You can recall the first song within the selected category by pressing the +/YES and –/NO buttons simultaneously.
- See "Demonstration songs" on page 50 for details on demonstration songs.

6 Press the PLAY/PAUSE button.

Playback begins.
The PLAY/PAUSE lamp lights up and the time counter (measures) on the display advances.

See also "Operations during Playback" on page 22.

Playing Back the Preset Song

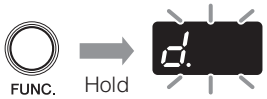
Besides the demonstration songs, 50 piano songs are preset in this unit. These correspond to the score in the music book "50 greats for the Piano." This will help you to practice playing along with the song playback.

1 **Press the FUNC. button repeatedly to switch the function to SONG.**

The song number of the currently selected category appears on the display.

2 **Hold the FUNC. button for a second to switch to the song category selection display.**

The currently selected song category blinks on the display.



3 **Press the +/YES or –/NO button to select "P." (preset songs).**

4 **Press the FUNC. button to return to the song selection display.**

5 **Press the +/YES or –/NO button to select the desired song number.**

Song Number		Explanation
P.01	P.01 – P.50	Plays back only the selected song. When the playback advanced to the end of the selected song, playback stops.
P.rd	Random playback	Plays back all preset songs continuously in random order.
P.AL	All playback	Plays back all preset songs continuously in sequence.

Note

- You can recall the first song within the selected category by pressing the +/YES and –/NO buttons simultaneously.
- See "Preset songs" on page 50 for details on preset songs.

6 **Press the PLAY/PAUSE button.**

Playback begins.
The PLAY/PAUSE lamp lights up and the time counter (measures) on the display advances.

See also "Operations during Playback" on page 22.

Playing Back the Song Recorded on the Internal Memory

Your performance that has been recorded as a MIDI song and saved on the internal memory can also be played back.

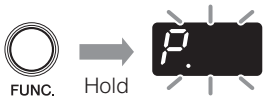
Note
To record your performance, see “Recording Your Performance on the Internal Memory” on page 24.

1 Press the FUNC. button repeatedly to switch the function to SONG.

The song number of the currently selected category appears on the display.

2 Hold the FUNC. button for a second to switch to the song category selection display.

The currently selected song category blinks on the display.



3 Press the +/YES or –/NO button to select “U.” (user song on the internal memory).

4 Press the FUNC. button to return to the song selection display.

5 Press the +/YES or –/NO button to select the desired song number.

Song Number		Explanation
U.01	U.01 – U.10	Plays back only the selected song. When the playback advanced to the end of the selected song, playback stops.
U.rd	Random playback	Plays back all user songs on the internal memory continuously in random order.
U.AL	All playback	Plays back all user songs on the internal memory continuously in sequence.

Note
- You can recall the first song within the selected category by pressing the +/YES and –/NO buttons simultaneously.
- If you select an empty song (which contains no data), the song number and the blank indication (- - -) appears alternately on the display.
- If the internal memory contains no songs, “random playback” and “all playback” do not appear on the display.

6 Press the PLAY/PAUSE button.

Playback begins.
The PLAY/PAUSE lamp lights up and the time counter (measures) on the display advances.

See also “Operations during Playback” on page 22.

Playing Back the Song Saved on the USB Storage Device

Connecting commercially available USB storage device to the unit allows you to play back songs stored on that device.

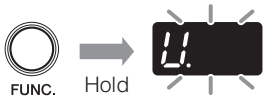
1 Connect the USB storage device to the USB port at the front of the control box.

For details, see “Connecting the USB Storage Device” on page 36.

2 Press the FUNC. button repeatedly to switch the function to SONG.

The song number of the currently selected category appears on the display.

3 Hold the FUNC. button for a second to switch to the song category selection display.



The currently selected song category blinks on the display.

4 Press the +/YES or –/NO button to select desired category.

Song Category		Explanation
S.	USB MIDI (user songs)	The MIDI songs you recorded and saved on the USB storage device.
F.	USB MIDI (external songs)	The MIDI songs created with other instrument on the USB storage device.
A.	USB AUDIO (user songs)	The audio songs you recorded and saved on the USB storage device.
C.	USB AUDIO (external songs)	The audio songs created with other instrument on the USB storage device.

Note
If the USB storage device contains no external songs, song category for external songs (F. or C.) does not appear on the display.

5 Press the FUNC. button to return to the song selection display.

Playing Back the Song Saved on the USB Storage Device

6 Press the +/YES or –/NO button to select the desired song number.

Song Number		Explanation
S.00	S.00 – S.99	Plays back only the selected song. When the playback advanced to the end of the selected song, playback stops.
F.00 100	F.00 – F.99 100 – 399	
A.00	A.00 – A.99	
C.00 100	C.00 – C.99 100 – 399	
S.rd	Random playback	Plays back all songs in the selected category continuously in random order. (The example shows the USB MIDI user song category.)
S.AL	All playback	Plays back all preset songs in the selected category continuously in sequence. (The example shows the USB MIDI user song category.)

Note

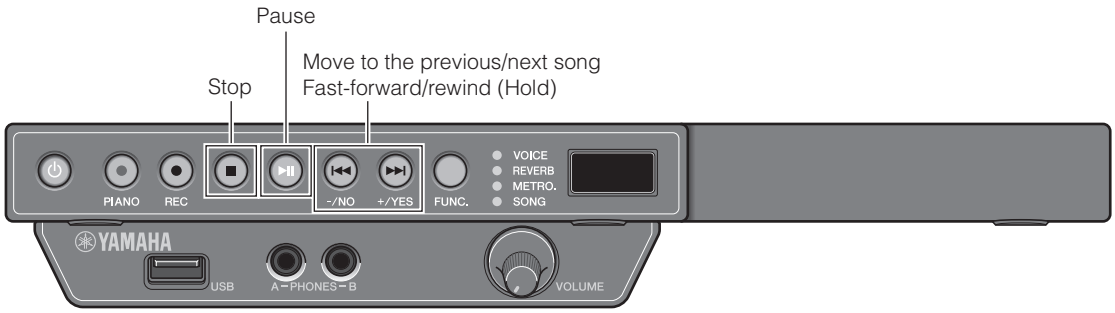
- You can recall the first song within the selected category by pressing the +/YES and –/NO buttons simultaneously.
- If you select the user songs that contains no data, the song number and the blank indication (- - -) appears alternately on the display.
- If the selected song category contains no songs, “random playback” and “all playback” do not appear on the display.

7 Press the PLAY/PAUSE button.

Playback begins.
The PLAY/PAUSE lamp lights up and the time counter (measures or time) on the display advances.

See also “Operations during Playback” on page 22.

Operations during Playback



■ Pausing playback

You can pause playback and restart it from where the song was paused.
Press the PLAY/PAUSE button during playback. While playback is paused, the PLAY/PAUSE lamp blinks.
Press the PLAY/PAUSE button to restart playback again.

■ Stopping playback

You can stop playback and start it from the beginning of the song.
Press the STOP button during playback.
Press the PLAY/PAUSE button to start playback again.

■ Moving to the other song

To move to the previous song

Press the –/NO button at the beginning of the song, during playback or pause.

To move to the next song

Press the +/YES button during playback or pause.

To move to the beginning of the song

Press the –/NO button during playback or pause.

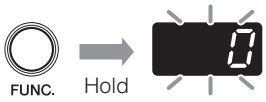
■ Fast-forward or rewind

Hold the +/YES or –/NO button during playback or pause.

Changing the Playback Tempo

You can speed up or slow down the playback tempo. Slowing down the playback tempo can be useful when practicing a difficult piano part.

1 During playback or pause, hold the FUNC. button for a second to switch to the tempo setting display.



The current tempo setting blinks on the display.

2 Press the +/YES or –/NO button to adjust the tempo.

You can adjust the playback tempo in the range of –50 to +50 (%). Set 0 to revert to the original tempo.

Note
- You can adjust the tempo relatively for the original one. For example, if you set 10% for the song of which tempo is 100 bpm, the song will be played back at 110 bpm (10% faster than the original).
- You can recall the original tempo by pressing the +/YES and –/NO buttons simultaneously.

3 Press the FUNC. button to return to the song playback display.

Note
- The tempo reverts to its original tempo when you select another song.
- You cannot change the playback tempo of audio songs.

Chapter

4

Recording Your Performance

Recording Your Performance on the Internal Memory

You can record your performance on the internal memory of the unit. Recorded performances are saved as a MIDI song (SMF0).

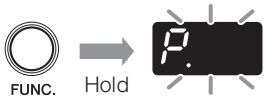
Note
- You can record up to 10 songs on the internal memory.
- You can record up to approximately 500 KB, which equates to a standard song of approximately 30 minutes in length, per one recording.
- The recorded performances are preserved even if you turn the unit off.
- You can also use metronome when recording your performance (page 28).

1 **Press the FUNC. button repeatedly to switch the function to SONG.**

The song number of the currently selected category appears on the display.

2 **Hold the FUNC. button for a second to switch to the song category selection display.**

The currently selected song category blinks on the display.



3 **Press the +/YES or –/NO button to select “U.” (user song on the internal memory).**

4 **Press the FUNC. button to return to the song selection display.**

5 **Press the REC button.**

The REC lamp blinks and the unit turns into the recording standby mode.

The smallest number of empty song (which contains no data) in the selected song category is automatically selected.

Note
- If there is no empty song, the last song on the internal memory is selected. The display shows the song number and “FUL” alternately.
- If the capacity of the memory is running out, “EnP” appears on the display. You can start recording, but the capacity may become full during recording. We recommend you to delete unnecessary files first (page 31), to ensure sufficient capacity.

Recording Your Performance on the Internal Memory

6 Press the +/YES and –/NO buttons to select the destination song number.

Note
- If you select an empty song (which contains no data), the song number and the blank indication (- - -) appears alternately on the display.
- Note that the new recording will erase the existing data if you select a song which contains data.
- To cancel recording, press the STOP or REC button.

7 Press the PLAY/PAUSE button.

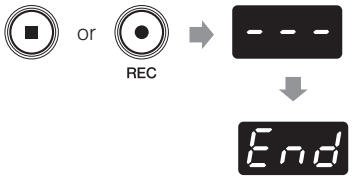
(Measures)

Recording starts.
The REC and PLAY/PAUSE lamps light up and the time counter (measures) on the display advances.

8 Begin playing.

Note
If the song being recorded exceeds the size limit (approximately 500 KB) during recording, “FUL” appears on the display and recording stops automatically. Press either the STOP, +/YES or –/NO button to save the data.

9 Stop playing, and press the STOP or REC button.



Recording stops.
When recording is stopped, dashes appear on the display indicating that recorded data is being saved.
If the data is successfully saved, “End” will appear on the display.
Then the song number will appear.

⚠ Caution
Do not turn the unit off while dashes appear on the display as this may corrupt the data or damage the internal memory.

Note
- If the capacity of the memory has run out during recording, “FUL” appears on the display and the data is not saved. Delete unnecessary files (page 31) and try again.
- If you stop recording without playing, the selected song will be deleted.

Recording Your Performance on the USB Storage Device

You can record your performance directly on the USB storage device. Recorded performances are saved as a MIDI song (SMF0) or an audio song (USB Audio Recorder, 44.1kHz/16bit stereo WAV).

Note
- You can record as much as the capacity of the USB storage device allows.
- You can record up to approximately 500 KB per one MIDI song recording and up to 80 minutes per one audio song recording.
- You can also use metronome when recording your performance (page 28).

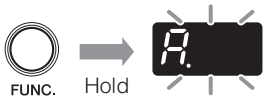
1 Connect the USB storage device to the USB port at the front of the control box.

For details, see "Connecting the USB Storage Device" on page 36.

2 Press the FUNC. button repeatedly to switch the function to SONG.

The song number of the currently selected category appears on the display.

3 Hold the FUNC. button for a second to switch to the song category selection display.



The currently selected song category blinks on the display.

4 Press the +/YES or –/NO button to select desired category.

Song Category		Explanation
S.	USB MIDI (user songs)	Select this to record your performance as a MIDI song
A.	USB AUDIO (user songs)	Select this to record your performance as an audio song

5 Press the FUNC. button to return to the song selection display.

6 Press the REC button.

The REC lamp blinks and the unit turns into the recording standby mode.
The smallest number of empty song (which contains no data) in the selected song category is automatically selected.

Note
- If there is no empty song, "FUL" appears on the display.
- If the capacity of the USB storage device is running out, "EnP" appears on the display. You can start recording, but the capacity may become full during recording. We recommend you to delete unnecessary files first (page 31), to ensure sufficient capacity.

Recording Your Performance on the USB Storage Device

7 Press the +/YES or –/NO button to select the destination song number.

Note
- If you select an empty song (which contains no data), the song number and the blank indication (- - -) appears alternately on the display.
- Note that the new recording will erase the existing data if you select a song which contains data.
- To cancel recording, press the STOP or REC button.

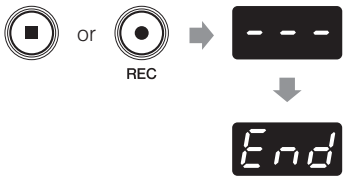
8 Press the PLAY/PAUSE button.

Recording starts.
The REC and PLAY/PAUSE lamps light up and the time counter (measures or time) on the display advances.

9 Begin playing.

Note
- [For MIDI song recording] If the song being recorded exceeds the size limit (approximately 500 KB) during recording, “FUL” appears on the display and recording stops automatically. Press either the STOP, +/YES or –/NO button to save the data.
- [For audio song recording] If the song being recorded exceeds the size limit (80 minutes) or the capacity of the USB storage device has run out during recording, “FUL” appears on the display and recording stops automatically. Press either the STOP, +/YES or –/NO button to save the data.
- [For audio song recording] The sound input from the AUX IN jack is also recorded.

10 Stop playing, and press the STOP or REC button.



Recording stops.
When recording is stopped, dashes appear on the display indicating that recorded data is being saved.
If the data is successfully saved, “End” will appear on the display.
Then the song number will appear.

⚠ Caution
Do not turn the unit off while dashes appear on the display as this may corrupt the data or damage the USB storage device.

Note
- [For MIDI song recording] If the capacity of the USB storage device has run out during recording, “FUL” appears on the display and the data is not saved. Delete unnecessary files (page 31) and try again.
- [For MIDI song recording] If you stop recording without playing, the selected song will be deleted.
- [For audio song recording] If you stop recording without playing, a song with no sound will be saved.

Recording with the Metronome

You can use the metronome to record performance.

1 Press the FUNC. button repeatedly to switch the function to METRO.

The current tempo setting appears on the display.

2 Press the PLAY/PAUSE button to start the metronome.

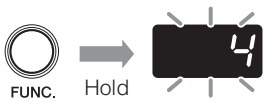
3 Press the +/YES or –/NO button to change the tempo.

You can change the tempo in the range of 5 to 500 (bpm).

Note
You can recall the default tempo setting (120) by pressing the +/YES and –/NO buttons simultaneously.

4 Hold the FUNC. button for a second to switch to the beat setting display.

The current beat setting blinks on the display.



5 Press the +/YES or –/NO button to change the beat.

You can change the beat in the range of 2 to 15, or 0.
The first beat is accented with the bell sound and the rest with clicks.
When the beat is set to 0, clicks sound on all beat.

Note
You can recall the default beat setting (0) by pressing the +/YES and –/NO buttons simultaneously.

6 Press the FUNC. button to return to the tempo setting display.

7 Start recording.

See “Recording Your Performance on the Internal Memory” on page 24 or “Recording Your Performance on the USB Storage Device” on page 26.

Note
- The metronome also stops when recording stops.
- The metronome sound is not recorded.

Chapter

5 Handling Song Files

Copying a Song File to the USB Storage Device

You can copy the user song on the internal memory to the USB storage device. You can use this function to make a backup on the USB storage device to protect your valuable music data.

Note

You can copy only the user song on the internal memory to the USB storage device.

1 Connect the USB storage device to the USB port at the front of the control box.

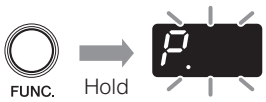
For details, see “Connecting the USB Storage Device” on page 36.

2 Press the FUNC. button repeatedly to switch the function to SONG.

The song number of the currently selected category appears on the display.

3 Hold the FUNC. button for a second to switch to the song category selection display.

The currently selected song category blinks on the display.



4 Press the +/YES or –/NO button to select “U.” (user song on the internal memory).

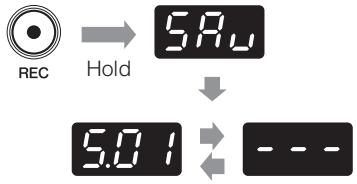
5 Press the FUNC. button to return to the song selection display.

6 Press the +/YES or –/NO button to select the desired song number.

Continued on next page

Copying a Song File to the USB Storage Device

7 Hold the REC button for 3 seconds.



"SAv" appears on the display.
Then the smallest number of empty song in the USB MIDI user song category and the blank indication (- - -) appears alternately on the display.

Note
- If there is no empty song in the USB MIDI user song category, "FUL" appears on the display and the song cannot be copied. Delete unnecessary files (page 31) and try again.
- You cannot copy demonstration songs or preset songs. If you try to copy such songs, "E01" or "Pro" appears on the display.

8 Press the +/YES or –/NO buttons to select the destination song number.

9 Press the FUNC. button.

"n-y" and "SAv" appears alternately on the display.

10 Press the +/YES button.

Copying starts.
Dashes appear on the display indicating that the selected song is being copied.
If the song is successfully copied, "End" will appear on the display.

⚠ Caution
Do not turn the unit off or disconnect the USB storage device while dashes appear on the display as this may corrupt the data or damage the internal memory and/or the USB storage device.

Note
To cancel copying, press the –/NO or STOP button.

Deleting a Song File

You can delete the user song on the internal memory or the USB storage device.

Note
You can delete only the user song on the internal memory or the USB storage device.

1 **To delete the song file stored on the USB storage device, connect the USB storage device to the USB port at the front of the control box.**

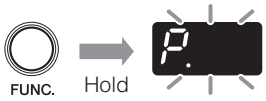
For details, see “Connecting the USB Storage Device” on page 36.

2 **Press the FUNC. button repeatedly to switch the function to SONG.**

The song number of the currently selected category appears on the display.

3 **Hold the FUNC. button for a second to switch to the song category selection display.**

The currently selected song category blinks on the display.



4 **Press the +/YES or –/NO button to select desired category.**

Song Category		Explanation
U.	User song on the internal memory	Select this to delete the user song on the internal memory
S.	USB MIDI (user songs)	Select this to delete the MIDI songs on the USB storage device
A.	USB AUDIO (user songs)	Select this to delete the audio songs on the USB storage device

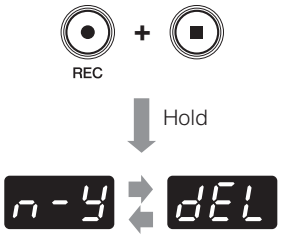
5 **Press the FUNC. button to return to the song selection display.**

6 **Press the +/YES or –/NO button to select the desired song number.**

Continued on next page

Deleting a Song File

7 Hold the REC and STOP buttons simultaneously for 3 seconds.



"n-y" and "dEL" appears alternately on the display.

Note
You cannot delete songs other than user songs. If you try to delete such songs, "E01" or "Pro" appears on the display.

8 Press the +/YES button.

Deletion starts.
Dashes appear on the display indicating that the selected song is being deleted.
If the song is successfully deleted, "End" will appear on the display.

⚠ Caution
Do not turn the unit off or disconnect the USB storage device while dashes appear on the display as this may corrupt the data or damage the internal memory and/or the USB storage device.

Note
To cancel deleting, press the –/NO or STOP button.

Chapter
6

Connecting to Other Devices

Connecting to Audio Devices

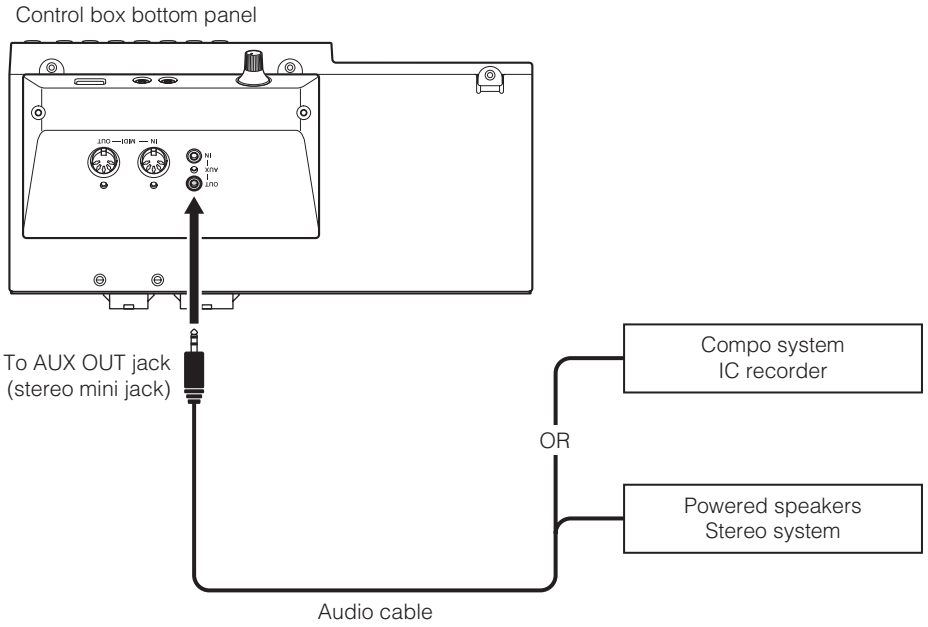
⚠ Caution
Be sure to turn the unit and audio devices off before attempting to connect them.

Note
The AUX IN or AUX OUT jack on this unit is a stereo mini jack. If your connection cable is not compatible, you will need to use an adaptor. Please use a nonresistant cable and adaptor.

■ Connecting to the AUX OUT jack

When connected to a compo system or IC recorder:
You can record performances played using the Silent Piano™ function.

When connected to powered speakers or a stereo system:
You can listen to performances played using the Silent Piano™ function. The signal output from this jack is the same sound as that heard when listening through headphones.

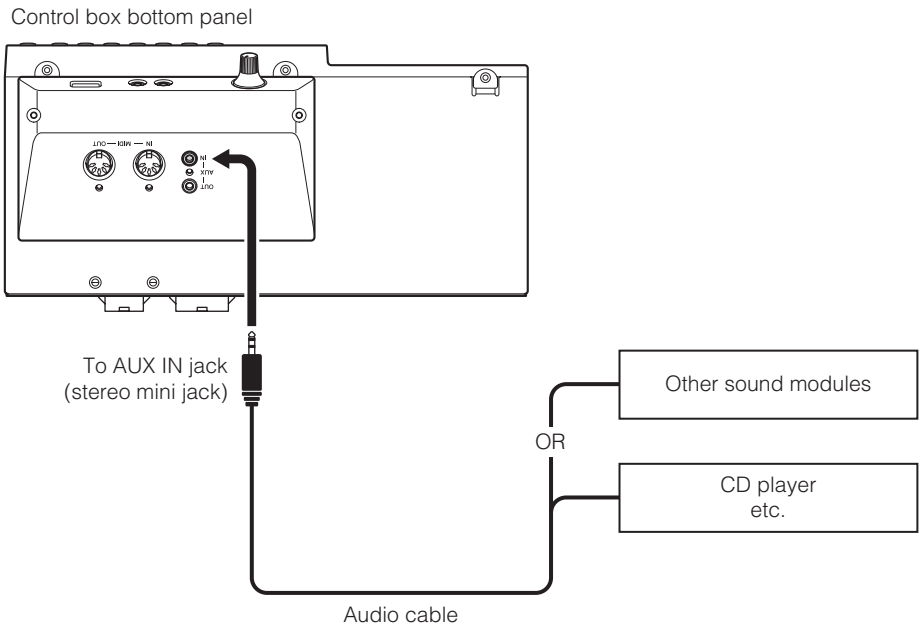


Note
Adjusting the volume with the VOLUME knob affects the output level of the AUX OUT jack.

Connecting to Audio Devices

■ Connecting to the AUX IN jack

When connected to other sound modules or playback devices (such as CD players):
You can use the Silent Piano™ function together with the sound received from the connected devices.



⚠ Caution
Do not route the output from the AUX OUT jack to the AUX IN jack. Doing so will cause feedback of the audio signal which may damage the unit and/or the connected device.

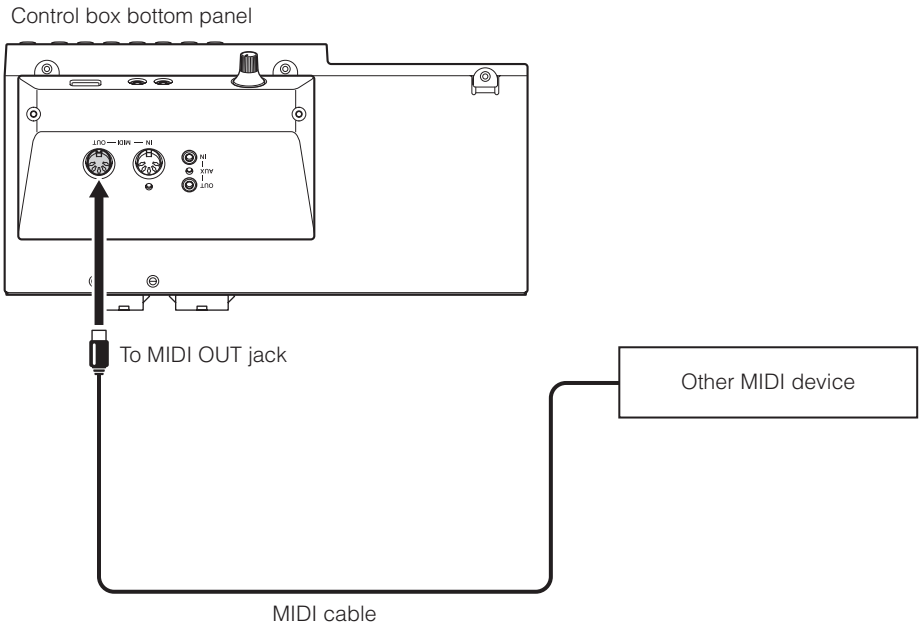
Note
- During the playback of audio songs, you cannot hear the sound input through the AUX IN jack.
- You can transpose (page 42) or fine tune (page 42) the pitch of the sound input through the AUX IN jack.

Connecting to MIDI Devices

⚠ Caution
Be sure to turn the unit and MIDI devices off before attempting to connect them.

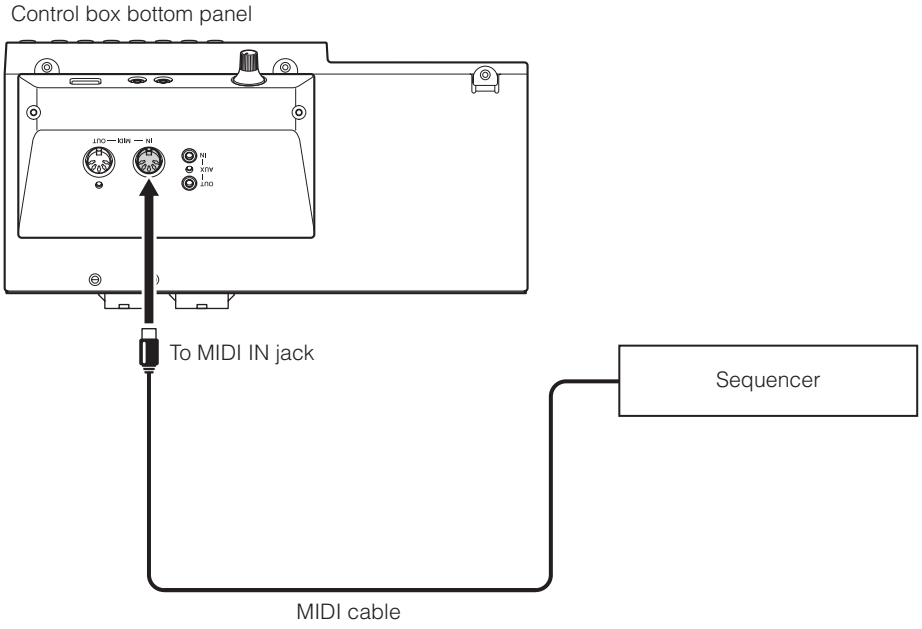
■ Connecting to the MIDI OUT jack

When connected to other MIDI device:
You can reproduce the Silent Piano™ performances using sound modules such as synthesizers and other MIDI devices.



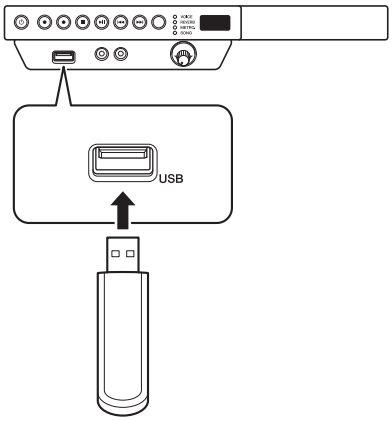
■ Connecting to the MIDI IN jack

When connected to a sequencer:
You can use the sound module of this unit to reproduce performance data received from connected devices.



Connecting the USB Storage Device

Connecting commercially available USB storage device to the unit allows you save your performance, and playback songs stored on the device. Connect the USB storage device into the USB port at the front of the control box.



⚠ Caution

- Do not remove the USB storage device or turn the unit on or off during data transfer as breakage may result.
- Do not insert and remove the USB storage device too frequently as breakage may result.
- Be careful not to bump the USB storage device with your legs when it is connected to the unit.
- Do not insert any objects other than the USB storage device into the USB port as it may become unusable.

Note

- Check that the USB storage device is free of memory and software protection before attempting to use it, as these kinds of protection will prohibit access to the memory.
- The unit is USB 1.1 compliant. You can also connect USB 2.0 devices, however data will be transferred at USB 1.1 speeds.
- You can use only one USB storage device with the unit.

■ Compatible devices

USB flash memory

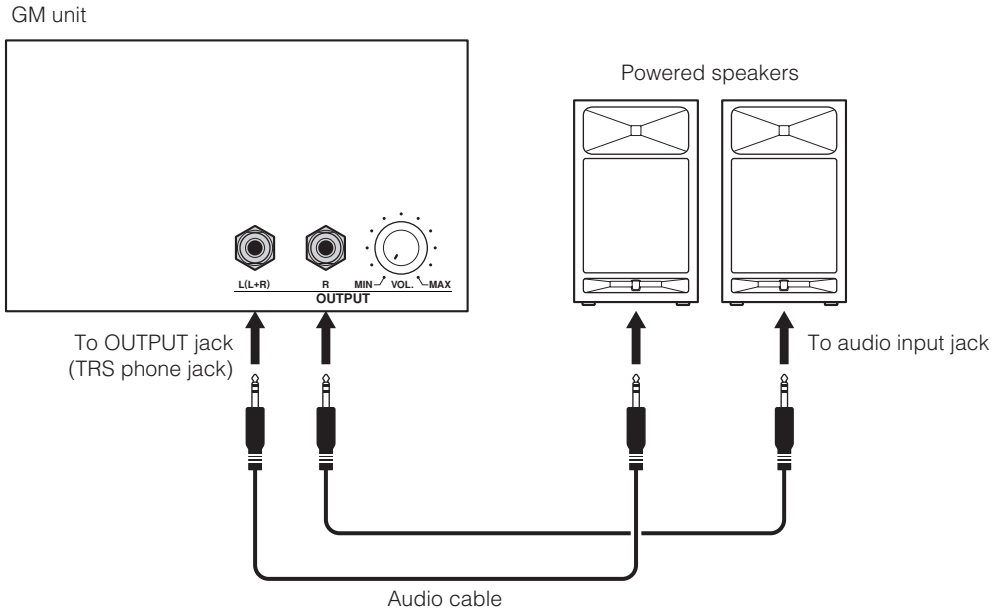
You can use commercially available USB flash memories. The USB flash memory should be formatted in FAT16 or FAT32 file system.

Note

Yamaha does not assure the operation of the commercially available USB flash memories.

Connecting Powered Speakers [for Grand Piano]

The OUTPUT L (L+R)/R jacks let you connect the optional powered speakers. You can also use the OUTPUT VOL. knob to fine-adjust the volume of these jacks.



Note

- Adjusting the volume with the VOLUME knob also affects the output level of the OUTPUT L (L+R)/R jacks.
- If you want to output monaural sound with one speaker, connect it to the OUTPUT L (L+R) jack.

Chapter

7

Using Various Functions

Setting the Various Convenient Functions (Function Setup)

To get the most out of your piano, set some of the various convenient functions, such as fine tuning of the pitch, adjusting the metronome volume, etc.

■ Function Setup items

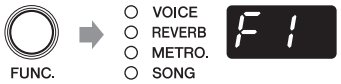
Function Setup Item		Item Number	Page
Brilliance		F1	40
Touch	Touch Sensitivity	F2.1	40
	FIXED Velocity	F2.2	40
Keyboard	Keyboard Transpose	F3.1	40
	Keyboard Tuning	F3.2	40
Scale	Scale	F4.1	41
	Base Note	F4.2	41
Metronome Volume		F5	41
Song	Single Repeat	F6.1	41
	Song Balance	F6.2	42
	Song Transpose	F6.3	42
	Audio Tuning	F6.4	42
Acoustic Processing	Damper Resonance Depth	F7.1	42
	String Resonance Depth	F7.2	42
	Sustain Sample Depth	F7.3	43
	Key-off Sample Volume	F7.4	43
MIDI	MIDI Transmit Channel	F8.1	43
	Piano Playback Channel	F8.2	43
	Local Control	F8.3	44
	Program Change	F8.4	44
	Control Change	F8.5	44
Auto Power-off		F9	44

Setting the Various Convenient Functions (Function Setup)

■ Basic operations

1 **Press the FUNC. button repeatedly to turn off all function indicators.**

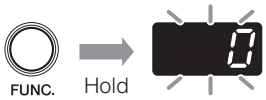
The unit enters the Function Setup mode and the Function Setup item number appears on the display.



2 **Press the +/YES or –/NO button to select the desired item.**

3 **Hold the FUNC. button for a second to switch to the parameter setup display.**

The current parameter for the selected item blinks on the display.



4 **Press the +/YES or –/NO button to change the parameter.**

Note
You can recall the default parameter by pressing the +/YES and –/NO buttons simultaneously.

5 **Press the FUNC. button to return to the item selection display.**

6 **Press the FUNC. button again to exit the Function Setup mode.**

Details on Each Function Setup Item

■ Brilliance

You can adjust the timbre brilliance of the sound from mellow to bright.

Setting range	–2 (mellow)	The unit produces soft and mellow tone.
	–1 (mellow/normal)	The setting between mellow and normal.
	0 (normal)	The unit produces standard tone.
	1 (normal/bright)	The setting between normal and bright.
	2 (bright)	The unit produces bright tone.
Default setting		0 (normal)

Note
This setting does not revert to its default setting when you turn the unit off.

■ Touch Sensitivity

You can select the keyboard touch sensitivity. Select one to match different playing styles and preference.

Setting range	–2 (soft)	The unit produces maximum loudness with a light keystroke.
	–1 (soft/medium)	The setting between soft and medium.
	0 (medium)	The unit responses to a fairly standard keystroke.
	1 (medium/hard)	The setting between medium and hard.
	2 (hard)	The unit requires a quite hard keystroke to produce maximum loudness.
	Off (FIXED)	The unit produces all notes at the same volume regardless of the strength of keystroke.
Default setting		0 (medium)

Note
- You can set the velocity in “F2.2 FIXED Velocity” when Off (FIXED) is selected.
- This setting does not revert to its default setting when you turn the unit off.

■ FIXED Velocity

You can change the velocity when you select Off (FIXED) in the Touch Sensitivity setting.

Setting range	1 to 127
Default setting	64

Note
- This item does not appear when the parameter other than Off (FIXED) is selected in “F2.1 Touch Sensitivity.”
- This setting does not revert to its default setting when you turn the unit off.

■ Keyboard Transpose

You can transpose the pitch of keyboard playing. Transposition can be set in semitone increments. For example, if you set the transposition amount to 5, playing C3 key produces pitch F3.

Setting range	–12 to 12
Default setting	0

■ Keyboard Tuning

You can fine tune the pitch of the keyboard in 0.2 Hz increments. This is useful when you play the piano along with other instruments.

Setting range	414.8 to 466.8 (Hz)
Default setting	440.0 (Hz)

Note
- The value appears as a two-digit number and one decimal place (e.g. “40.2” for 440.2 Hz).
- This setting does not revert to its default setting when you turn the unit off.

Details on Each Function Setup Item

■ Scale

Certain genres of music are composed based on scales other than equal temperament, which is the common piano tuning scale. You can enjoy various scales with this setting.

Setting range	1 (equal temperament)	One octave is divided into twelve equal intervals. Currently the most popular piano tuning scale.
	2 (pure temperament major)	Based on natural overtones, three major chords using these scales produce a beautiful, pure sound.
	3 (pure temperament minor)	
	4 (Pythagorean temperament)	This scale, designed by Pythagoras, a Greek philosopher, is based on the interval of a perfect 5th. The 3rd produces swells, but the 4th and 5th are beautiful and suitable for some leads.
	5 (meantone temperament)	This scale is an improvement of the Pythagorean in that the swell of the 3rd has been eliminated. The scale became popular during the late 16th century through the late 18th century.
	6 (Werckmeister temperament)	These scales combine meantone temperament and Pythagorean temperament in different ways. With these scales, modulation changes the impression and feel of the songs. They were often used in the era of Bach and Beethoven. They are often used today to reproduce the music of that era on harpsichords.
	7 (Kirnberger temperament)	
Default setting		1 (equal temperament)

Note
This setting does not revert to its default setting when you turn the unit off.

■ Base Note

You need to specify the root when you select a scale other than equal temperament in the Scale setting.

Setting range	C, C#, D, E ♭, E, F, F#, G, A ♭, A, B ♭, B
Default setting	C

Note
- This item does not appear when 1 (equal temperament) is selected in “F4.1 Scale.”
- Upper bar indicates the sharp note, and lower bar indicates the flat note.

  (C#)

  (E ♭)
- This setting does not revert to its default setting when you turn the unit off.

■ Metronome Volume

You can adjust the volume of the metronome.

Setting range	1 to 20
Default setting	15

■ Single Repeat

You can play back the currently selected song repeatedly.

Setting range	On, Off
Default setting	Off

Note
This setting is deactivated during random playback or all playback.

Details on Each Function Setup Item

■ Song Balance

You can adjust the volume balance between keyboard playing and song playback (MIDI and audio). Increase the value to reduce the volume of keyboard playing. Decrease the value to reduce the volume of song playback.

Setting range	–64 to 64
Default setting	0

Note
- The original volume balance is set for some PianoSoft songs. During the playback of such songs, priority is given to their original volume balance.
- The piano sound of PianoSoft songs (including the demonstration and preset songs on the unit) is recognized as keyboard playing. Therefore, increasing this value reduces the volume of the piano sound.
- This setting does not revert to its default setting when you turn the unit off.

■ Song Transpose

You can transpose the pitch of song playback (MIDI and audio) or sound input through the AUX IN jack. Transposition can be set in semitone increments. For example, if you set the transposition amount to 5, playing C3 key produces pitch F3.

Setting range	–12 to 12
Default setting	0

■ Audio Tuning

You can fine tune the pitch of audio song playback or sound input through the AUX IN jack in 1 cent increments.

Setting range	–50 to 50 (cent)
Default setting	0 (cent)

Note
100 cents is equal to one semitone.

■ Damper Resonance Depth

You can set the depth of the Damper Resonance effect, which is applied when you press the damper pedal. This setting is effective for the Piano voice.

Setting range	0 to 10
Default setting	5

Note
This setting does not revert to its default setting when you turn the unit off.

■ String Resonance Depth

You can set the depth of the String Resonance effect. This setting is effective for the Piano voice.

Setting range	0 to 10
Default setting	5

Note
This setting does not revert to its default setting when you turn the unit off.

String Resonance
When the hammer of an acoustic piano strikes the string, other strings will resonate, creating an expressive tone. The effect that reproduces this resonance is called “String Resonance effect.” This effect reproduces the natural resonance on the strings of the keys that are already held down when you play the keyboard.

Details on Each Function Setup Item

■ Sustain Sample Depth

You can set the depth of the Sustain Sample effect, which is applied when you press the damper pedal. This setting is effective for the Piano voice.

Setting range	0 to 10
Default setting	5

Note
This setting does not revert to its default setting when you turn the unit off.

Sustain Sample
The sample of the unique change in tone of resonance on the strings and soundboard of an acoustic piano when you press the damper pedal.

■ Key-off Sample Volume

You can set the volume of the Key-off Sample. This setting is effective for the Piano voice.

Setting range	0 to 10
Default setting	5

Note
This setting does not revert to its default setting when you turn the unit off.

Key-off Sample
The sample of the subtle noises produced when you release your finger from the keyboard.

■ MIDI Transmit Channel

You can assign the channel on which the unit transmits the MIDI data of keyboard playing.

Setting range	1 to 16	The unit transmits the MIDI data of keyboard playing on assigned channel.
	Off	The unit does not transmit the MIDI data.
Default setting		1

Note
- When you use the dual voices, the first voice data is transmitted on the specified channel. The second voice data is transmitted on the next channel to the specified one.
- This setting does not revert to its default setting when you turn the unit off.

■ Piano Playback Channel

You can assign the desired channel that is played back as a piano part when the unit receives the MIDI data.

Setting range	Off	The unit plays back the MIDI data from the external MIDI device as a song part.
	1	The unit plays back the 1 channel of the MIDI data from the external MIDI device as a piano part.
	1–2	The unit plays back the 1 and 2 channels of the MIDI data from external MIDI device as piano parts
Default setting		Off

Note
This setting does not revert to its default setting when you turn the unit off.

Details on Each Function Setup Item

■ Local Control

You can select whether the keyboard playing data is transmitted to the internal tone generator of the unit.

Setting range	On	The keyboard playing data is transmitted to the internal tone generator. The note you played on the keyboard is reproduced with the internal tone generator of the unit.
	Off	The keyboard playing data is not transmitted to the internal tone generator. The note you played on the keyboard is reproduced on the external MIDI device.
Default setting		On

■ Program Change

You can select whether the unit transmits or receives program change numbers.

Setting range	On	The unit transmits or receives program change numbers.
	Off	The unit does not transmit or receive program change numbers.
Default setting		On

Note
- For details on program change numbers, see “MIDI Data Format” on page D7.
- This setting does not revert to its default setting when you turn the unit off.

■ Control Change

You can select whether the unit transmits or receives control change messages.

Setting range	On	The unit transmits or receives control change messages.
	Off	The unit does not transmit or receive control change messages.
Default setting		On

Note
- For details on control change messages, see “MIDI Data Format” on page D7.
- This setting does not revert to its default setting when you turn the unit off.

■ Auto Power-off

You can turn the power off automatically if you do not operate the unit for 30 minutes with the auto power-off function. You can activate or deactivate the auto power-off function.

Setting range	On	The auto power-off function is activated. The unit is automatically turned off if you do not operate it for 30 minutes.
	Off	The auto power-off function is deactivated. Use the POWER ⏻ button to turn the unit off.
Default setting		On

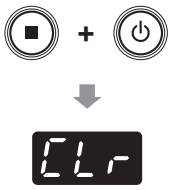
Note
This setting does not revert to its default setting when you turn the unit off.

Restoring the Default Settings

You can erase the backup of all settings made and restore the factory default settings.

1 **While holding the STOP button, press the POWER ⏻ button to turn the unit on.**

"CLr" appears on the display and all settings are reset to factory default.



⚠ Caution

DO NOT turn the unit off while "CLr" appears on the display as may corrupt the data or damage the internal memory.

Note

The user songs on the internal memory will be retained.

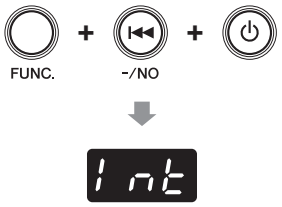
Changing the Language Support for the Song File Name

Depending on this setting, folders or files the unit can recognize vary.

Setting		Explanation
Int	International	Folders or files named in alphabet and umlaut can be recognized.
JA	Japanese	Folders or files named in alphabet and Japanese can be recognized.

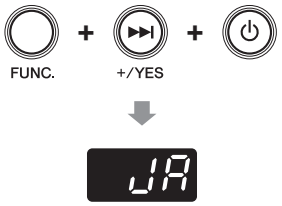
1 **To change this setting to International, while holding the FUNC. and –/NO buttons simultaneously, press the POWER ⏻ button to turn the unit on.**

"Int" appears on the display and the setting is changed to International.



To change this setting to Japanese, while holding the FUNC. and +/YES buttons simultaneously, press the POWER ⏻ button to turn the unit on.

"JA" appears on the display and the setting is changed to Japanese.



Note

This setting does not revert to its default setting when you turn the unit off.

Deactivating the Auto Power-off Function

1 While holding the FUNC. button, press the POWER ⏻ button to turn the unit on.

"PoF" appears on the display and the auto power-off function is deactivated.

Note

If you deactivate the auto power-off function with this step, "F9 Auto Power-off" in Function Setup (page 44) is automatically set to off.

Chapter

8

Appendix

Messages

Message	Situation	Remedy
CLr	The unit is being initialized to the factory default settings.	DO NOT turn the unit off when “CLr” appears in the display.
E01	The song file is not compatible with the unit, or the song file may be damaged.	You cannot select this song file.
E02	The USB storage device is protected.	Unprotect the USB storage device.
E03	The capacity of the USB storage device becomes full.	Delete unnecessary files on the USB storage device (page 31), or use another USB storage device with sufficient capacity.
	The number of files and folders exceeds the system limit.	Delete unnecessary files on the USB storage device (page 31).
E04	Audio song playback or recording has failed.	If you are using a USB storage device to which data has already been stored or deleted a number of times, first make sure that the device does not contain important data, then format it and connect to the unit again.
EEE	A malfunction has occurred in the unit.	Contact your nearest Yamaha dealer or authorized distributor.
EnP	The capacity of the internal memory on the unit or the USB storage device is running out.	Delete unnecessary files to ensure sufficient capacity before staring recording (page 31).
FCL	The internal memory is being cleaned up. All settings made and user song files on the internal memory are being cleared, because the power has been turned off before the operations were completed.	DO NOT turn the unit off when “FCL” appears in the display.
FUL	The capacity of the internal memory on the unit or the USB storage device is insufficient, and the operation cannot be completed.	Delete unnecessary files to ensure sufficient capacity before staring recording (page 31).
Pro	You tried to overwrite or delete a protected song.	You cannot overwrite or delete a protected song.
	You tried to overwrite a read-only file.	Cancel the read-only setting for the file.
UnF	The USB storage device connected to the unit is unformatted.	Format the USB storage device using a computer.
Uoc	The overcurrent is induced in the USB storage devices.	Disconnect the device from the USB port, and then turn the unit on again.
UU1	The unit cannot communicate with the USB storage device connected.	Disconnect the USB storage device and connection it again. If the message still appears even when the USB storage device is connected properly, the device may be damaged.
UU2	This USB storage device connected to the unit is not supported on the unit.	Try another USB storage device.
	The number of the USB storage devices connected exceeds the system limit.	You can use only one USB storage device with the unit.

Troubleshooting

If you have problems with the unit, here are a few troubleshooting tips. If you cannot solve the problem easily yourself, consult your Yamaha piano dealer. DO NOT attempt to repair the piano or the AC adaptor yourself.

Symptom	Cause	Remedy
The unit does not turn on.	The AC adaptor may not be plugged in correctly.	Insert the AC adaptor firmly into the DC12V or DC IN 12V jack and AC outlet (page 9).
The unit turns on but no sound is heard.	The VOLUME knob may be turned to the far left position.	Adjust the setting to an optimal level (page 11).
	The voice is set to Off.	Select the voice (page 12).
The pedal has no effect.	The pedal sensor may not be connected correctly.	Connect the cable firmly to the SENSOR jacks on the rear of the control box.
The acoustic piano emits sound when I am using the Silent Piano™ function to play.	Playing with extreme force may result in sound being emitted from the acoustic piano.	Moderate the strength of your playing.
The balance or volume varies when listening through commercially available headphones.	Headphone properties differ depending on their type, so different headphones may have different balance or volume characteristics.	Use the same type of headphones for optimum performance.
I can hear a rattling sound from the piano body when playing with the Silent Piano™ function.	This is not a fault. This is the sound of the acoustic piano's keystroke.	
When I play a rapid series of notes with the Silent Piano™ function, a loud sound is emitted that is not part of the performance.	This is not a fault. The structure of the Silent Piano™ causes this to occur in some cases.	
No reverb effect is applied to the sound.	The reverb depth may be set to 0.	Increase the reverb depth to apply an appropriate amount of reverb (page 14).
The sound lingers excessively.	The reverb depth or the Damper Resonance effect depth may be set to an excessive level.	Set these parameters to an appropriate level (pages 14 and 42).
Noise is heard from the headphones or speakers.	The noise may be due to interference caused by the use of a mobile phone in close proximity to the unit.	Turn the mobile phone off, or use it away from the unit.
	The headphones or speakers may not be connected correctly.	Connect the headphones or speakers to the corresponding jacks firmly (page 11 or 37).
The pitch of the unit is different to that of other instruments.	The pitch is different depending on the instrument.	You can adjust the pitch of this unit to match that of other instruments (page 38).

Preset Voice List

No.	Voice	Explanation
1	Piano	This sound was sampled from the Yamaha CFX concert grand piano. It uses different samples depending on the strength of your playing and produces smoother tonal changes. Even the tonal changes produced by the damper pedal and the subtle sounds of releasing a key are reproduced. The sympathetic vibration (String Resonance) that occurs among the strings of an acoustic piano has also been simulated. Suitable not only for classical compositions but also for piano pieces of any style.
2	Electric Piano 1	An electronic piano sound produced by an FM synthesizer. The tone will change as you vary your playing touch. Ideal for popular music. Pressing the soft pedal/shift pedal switches between on and off of the chorus effect.
3	Electric Piano 2	The sound of an electric piano using hammer-struck metallic “tines.” Soft tone when played lightly, and an aggressive tone when played hard. Pressing the soft pedal/shift pedal switches between on and off of the chorus effect.
4	Electric Piano 3	A different type of electric piano sound. Widely used in rock and popular music. Pressing the soft pedal/shift pedal switches between on and off of the chorus effect.
5	Harpsichord 1	The sound of the instrument frequently used in baroque music. Variations in playing touch will not affect the volume, and a characteristic sound will be heard when you release the key.
6	Harpsichord 2	A harpsichord with an added upper octave. Produces a more brilliant sound.
7	Vibraphone	Vibraphone played with relatively soft mallets. The tone becomes more metallic the harder you play. Pressing the soft pedal/shift pedal switches between on and off of the vibrato.
8	Celesta	The sound of a celesta (a percussion instrument in which hammers strike metallic bars to produce sound). This instrument is well-known for its appearance in “Dance of the Sugar-plum Fairies” from Tchaikovsky’s “Nutcracker Suite.”
9	Pipe Organ 1	This voice features the combination of pipes (8'+4'+2') of a principal (brass instrument) organ. It is suitable for Baroque church music.
10	Pipe Organ 2	This voice features a full coupler of a pipe organ, famous for the sound used in Toccata and Fugue by Bach.
11	Pipe Organ 3	A pipe organ sound that combines flute-type (woodwind type) stops of different pitches (8'+4'). This is a gentle sound that is ideal for accompanying hymns.
12	Pipe Organ 4	A pipe organ sound that combines flute-type (woodwind type) stops of different pitches (8'+4'+1-1/3'). This is brighter than Pipe Organ 3, and is suitable for solos.
13	Jazz Organ	The sound of a “tonewheel” type electric organ. Often heard in jazz and rock idioms. Pressing the soft pedal/shift pedal switches the rotary speaker speed (fast and slow).
14	Strings	Stereo-sampled, large-scale strings ensemble with realistic reverb.
15	Choir	A big, spacious choir voice. Perfect for creating rich harmonies in slow pieces.
16	Synth Pad	A warm, mellow, and spacious synth sound. Ideal for sustained parts in the background of an ensemble.
17	Piano + Strings	Combination of the Piano and Strings (with a slower attack) voices (dual voice).
18	Piano + Synth Pad	Combination of the Piano and Synth Pad voices (dual voice).
19	Piano + Electric Piano 1	Combination of the Piano and Electric Piano 1 voices (dual voice).

Song List

■ Demonstration songs

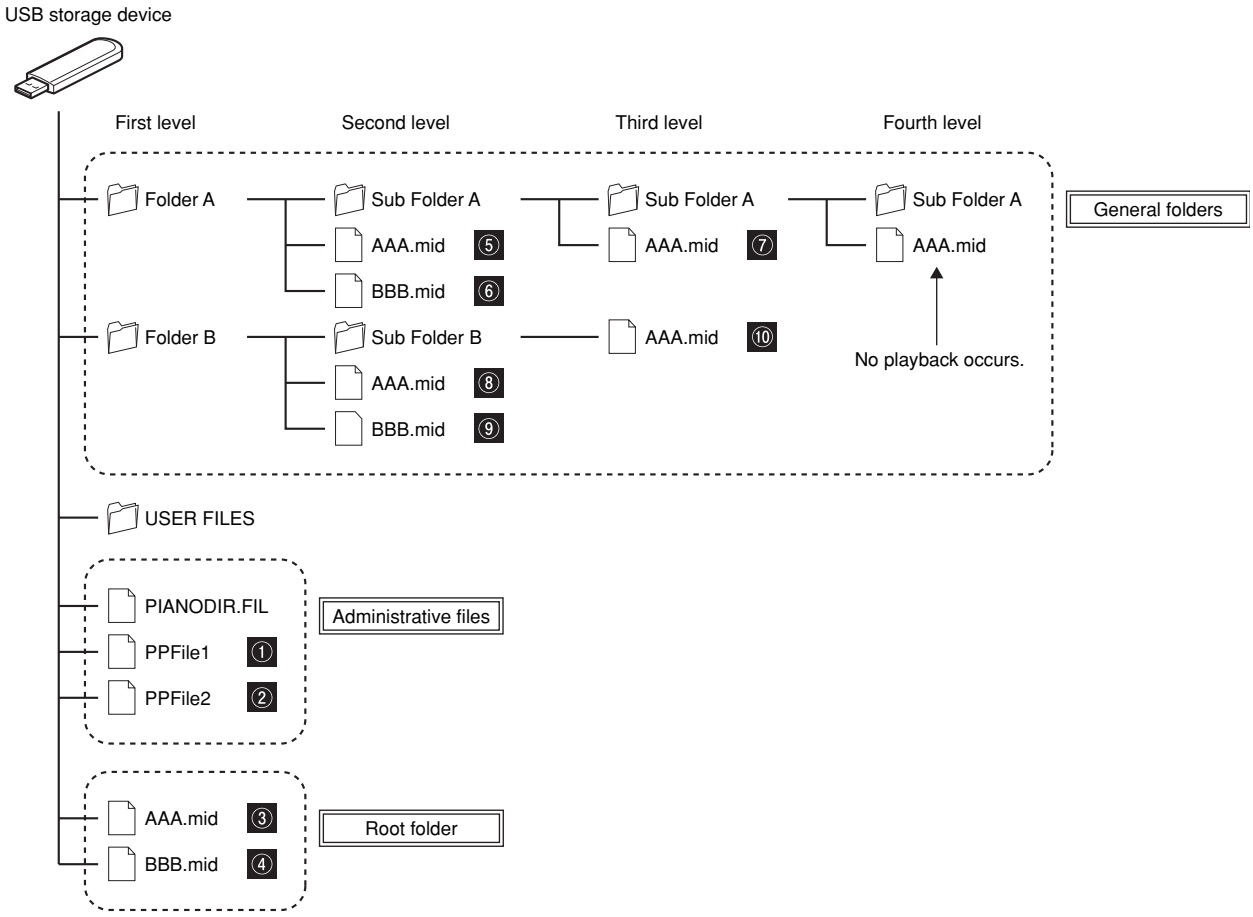
No.	Title <Composer>
d.01	Polonaise op.53 “Héroïque” <F. F. Chopin>
d.02	Piano Sonate No.18 K.576 1st mov. <W. A. Mozart>
d.03	“Little Overture” from The Nutcracker op.71a <P. I. Tchaikovsky>

■ Preset songs

No.	Title <Composer>	No.	Title <Composer>
P.01	Invention No.1 <J. S. Bach>	P.26	Etude op.10-12 “Revolutionary” <F. F. Chopin>
P.02	Invention No.8 <J. S. Bach>	P.27	Valse op.64-1 “Petit chien” <F. F. Chopin>
P.03	Gavotte <J. S. Bach>	P.28	Valse op.64-2 <F. F. Chopin>
P.04	Prelude (Wohltemperierte Klavier I No.1) <J. S. Bach>	P.29	Valse op.69-1 “L’adieu” <F. F. Chopin>
P.05	Menuett G dur BWV. Anh.114 <J. S. Bach>	P.30	Nocturne op.9-2 <F. F. Chopin>
P.06	Le Coucou <L-C. Daquin>	P.31	Träumerei <R. Schumann>
P.07	Piano Sonate No.15 K.545 1st mov. <W. A. Mozart>	P.32	Fröhlicher Landmann <R. Schumann>
P.08	Turkish March <W. A. Mozart>	P.33	La Prière d’une Vierge <T. Badarzewska>
P.09	Menuett G dur <W. A. Mozart>	P.34	Dolly’s Dreaming and Awakening <T. Oesten>
P.10	Little Serenade <J. Haydn>	P.35	Arabesque <J. F. Burgmuller>
P.11	Perpetuum mobile <C. M. v. Weber>	P.36	Pastorale <J. F. Burgmuller>
P.12	Ecossaise <L. v. Beethoven>	P.37	La chevaleresque <J. F. Burgmuller>
P.13	Für Elise <L. v. Beethoven>	P.38	Liebesträume Nr.3 <F. Liszt>
P.14	Marcia alla Turca <L. v. Beethoven>	P.39	Blumenlied <G. Lange>
P.15	Piano Sonate op.13 “Pathétique” 2nd mov. <L. v. Beethoven>	P.40	Barcarolle <P. I. Tchaikovsky>
P.16	Piano Sonate op.27-2 “Mondschein” 1st mov. <L. v. Beethoven>	P.41	Melody in F <A. Rubinstein>
P.17	Piano Sonate op.49-2 1st mov. <L. v. Beethoven>	P.42	Humoresque <A. Dvorak>
P.18	Impromptu op.90-2 <F. P. Schubert>	P.43	Tango (España) <I. Albeniz>
P.19	Moments Musicaux op.94-3 <F. P. Schubert>	P.44	The Entertainer <S. Joplin>
P.20	Frühlingslied op.62-2 <J. L. F. Mendelssohn>	P.45	Maple Leaf Rag <S. Joplin>
P.21	Jägerlied op.19b-3 <J. L. F. Mendelssohn>	P.46	La Fille aux Cheveux de Lin <C. A. Debussy>
P.22	Fantaisie-Impromptu <F. F. Chopin>	P.47	Arabesque 1 <C. A. Debussy>
P.23	Prelude op.28-15 “Raindrop” <F. F. Chopin>	P.48	Clair de lune <C. A. Debussy>
P.24	Etude op.10-5 “Black keys” <F. F. Chopin>	P.49	Rêverie <C. A. Debussy>
P.25	Etude op.10-3 “Chanson de l’adieu” <F. F. Chopin>	P.50	Cakewalk <C. A. Debussy>

Playback Sequence of Song Files on the USB Storage Device

The illustration below shows the playback sequence of song files stored on the USB storage device.



■ Playback sequence of user songs

User songs are named as follows, and saved in the USER FILES folder.

The "**" section indicates the song number. Playback occurs in order of the number in the "**" section.

- USERSONG**.MID (MIDI song)
- USERAUDIO**.WAV (audio song)

■ Playback sequence of external songs

Priority	Folder/File	
1	Administrative files	Playback occurs in the order specified in the administrative file.
2	Root folder	Playback occurs in an alphabetical order.
3	General folders	Playback occurs in an alphabetical order.

Note

The unit cannot recognize song files saved in a folder lower than the third level. If you manage song files on the USB storage device with the computer, make sure to save them to the first, second or third level folder.

Specifications

			Upright Piano	Grand Piano
Pedals			Damper pedal, Silencing pedal/ Sostenuto pedal[*1], Soft pedal	Damper pedal, Sostenuto pedal, Shift pedal
Sensor System	**Key Sensor**		Noncontact continuous detection optical sensor	
	Hammer Sensor		—	Noncontact 2-point optical fiber sensor
	Pedal Sensors	**Damper Pedal**	Continuous detection sensor	
		Sostenuto Pedal	ON/OFF detection sensor[*1]	ON/OFF detection sensor
		Soft/Shift Pedal	ON/OFF detection sensor	
Silencing System	**Mechanism**		Hammer shank stopper operated by silencing pedal/silencing lever[*1]	Hammer shank stopper operated by motor drive
	Action		—	Quick Escape mechanism
Internal Tone	**Digital Tone**	**Type**	AWM Stereo Sampling	
		Sound Engine (Piano)	CFX Binaural Sampling	
		Piano Effects	Damper Resonance, String Resonance, Sustain Sample, Key-off Sample	
		Polyphony (max.)	256	
	Number of Voices		19 (16 voices + 3 dual voices)	
	Voice Selection		Piano, Electric Piano 1, Electric Piano 2, Electric Piano 3, Harpsichord 1, Harpsichord 2, Vibraphone, Celesta, Pipe Organ 1, Pipe Organ 2, Pipe Organ 3, Pipe Organ 4, Jazz Organ, Strings, Choir, Synth Pad, Piano + Strings (dual), Piano + Synth Pad (dual), Piano + Electric Piano 1 (dual)	
	Voice Selection (Playback)		480 XG voices + 12 Drum / SFX kits	
Wave Memory			256MB	
Functions			Reverb Type Switch (Room, Hall 1, Hall 2, Stage)	
			Reverb Depth Adjustment	
			Metronome	
			MIDI Recording/Playback	
			Audio (WAV) Recording/Playback	
			Brilliance Adjustment (5 steps)	
			Pitch Control (414.8Hz to 466.8Hz)	
			Damper Resonance Depth Adjustment	
			String Resonance Depth Adjustment	
			Sustain Sample Depth Adjustment	
			Key-off Sample Volume Adjustment	
			Auto Power-off	
Preset Songs			53 (50 greats for the Piano + 3 piano demonstrations)	
Connectors		**Headphones**	PHONES (stereo mini jack) × 2	
		Audio	AUX IN/AUX OUT (stereo mini jack)	
		Speakers	—	OUTPUT L/R (TRS phone jack, impedance balanced)
		MIDI	MIDI IN/MIDI OUT	
		USB	USB TO DEVICE	
		Power	DC12V	DC IN 12V
Power Consumption			11W (DC 12V)	17W (DC 12V)
Weight			4 kg	10 kg
Accessories			AC adapter (PA-150A, PJP-PS04 or an equivalent recommended by Yamaha), Power cable[*2], Headphones (HPH-200P), Headphones hanger, Attachment screws for headphones hanger, Owner's manual, Music book "50 greats for the Piano"	

* 1 For models equipped with a sostenuto pedal.
* 2 Supplied only if the PJP-PS04 AC adaptor is supplied with your piano.

Index

A

AC adaptor 4, 9
Accessory 4
Administrative file 51
All playback 17, 18, 19, 21
Audio device 33, 34
Audio song 16, 51
Auto power-off 44, 46

B

Base note 41
Beat setting (metronome) 15, 28
Binaural sampling 3
Brilliance 40

C

Control box 7, 8
Control change 44
Copying 29

D

Damper pedal 6
Damper Resonance 6, 42
Deleting 31
Demo song 16, 17, 50
Dual voice 12, 49

E

ESEQ 16
External song 16, 51

F

Fast-forward 22
FIXED velocity 40
Function Setup 38, 40

G

General folder 51
GM unit 8, 37

H

Headphones 4, 11
Headphones hanger 4, 10

I

Internal memory 16, 19, 24

K

Key-off Sample 43

L

Language support 45
Local control 44

M

Message 47
Metronome 15, 28
Metronome volume 41
MIDI data format D7
MIDI device 35
MIDI IMPLEMENTATION CHART D18
MIDI song 16, 51
MIDI transmit channel 43

P

Pause 22
Piano playback channel 43
Playback 16
Playback sequence 51
Playback tempo 23
Power 10
Powered speakers 33, 37
Preset song 16, 18, 50
Program change 44

R

Random playback 17, 18, 19, 21
Recording 24
Restoring of the factory default setting 45
Reverb 14
Reverb depth 14
Reverb type 14
Rewind 22
Root folder 51

S

Scale 41
Shift pedal 6
Silencing lever 6, 11
Silent Piano™ function 11
Single repeat 41
SMF0 ..... 16, 24, 26
SMF1 16
Soft pedal 6
Song 16, 50
Song balance 42
Song category 16
Sostenuto pedal 6
Stop 22
String Resonance 42
Sustain Sample 43

T

Tempo setting (metronome) 15, 28
Touch sensitivity 40
Transpose 40, 42
Tuning of the pitch 40, 42

U

USB AUDIO 16
USB Audio Recorder 26
USB MIDI 16
USB storage device 20, 26, 29, 36, 51
USER FILES folder 51
User song 16, 51

V

Voice 12, 49, D7
Volume 11

W

WAV 16, 26

X

XG drum kit D5
XG voice D2